850

AD-A229

FOREIGN TECHNOLOGY DIVISION



METHOD OF THE PREPARATION OF TECHNICAL FOAM

by

B.S. Batalin, Yu. F. Ozhgibesov, et al.





BEST AVAILABLE COPY

Approved for public release; Distribution unlimited.

PARTIALLY EDITED MACHINE TRANSLATION

FTD-ID(RS)T-0953-90

26 October 1990

MICROFICHE NR: FTD-90-C-001019

METHOD OF THE PREPARATION OF TECHNICAL FOAM

By: B.S. Batalin, Yu. P. Ozhgibesov, et al.

English pages: 2

Source: USSR Patent Nr. 264207, 10 November 1970,

pp. 1

Country of origin: USSR

This document is a machine translation.

Input by: Jennifer M. Langford Merged by: Charles W. Guerrant Requester: AFAL/VSSC/R.H. Gerzeski

Approved for public release; Distribution unlimited.

THIS TRANSLATION IS A RENDITION OF THE ORIGINAL FOREIGN TEXT WITHOUT ANY ANALYTICAL OR EDITORIAL COMMENT. STATEMENTS OR THEORIES ADVOCATED OR IMPLIED ARE THOSE OF THE SOURCE AND DO NOT NECESSARILY REFLECT THE POSITION OR OPINION OF THE FOREIGN TECHNOLOGY DIVISION.

PREPARED BY:

TRANSLATION DIVISION FOREIGN TECHNOLOGY DIVISION WPAFB, OHIO.

U. S. BOARD ON GEOGRAPHIC NAMES TRANSLITERATION SYSTEM

| # A A A, A P P P E, r # B & E, t C C C S, S # B & V, v T T T M T, t # C D D, d # ¢ Ø Ø F, f # E E Ye, ye; E, e* X X X X Kh, kh # X x Zh, zh U U U TS, ts # 3 9 2, 2 | n |
|--|---|
| B θ E, t C c C c S, c C c B θ V, v T T T m T, t T r J m T, t T, t D r θ D, d Φ ¢ Φ Φ F, f E c E θ Ye, ye; E, e* X x X x Kh, kh T r T m T, t T, t D y y y y U, u T, f E c E θ Ye, ye; E, e* X x X x Kh, kh T r X x Z ii., ch U u U u Ts, ts D s S J Z, c U u U u Ch, ch | |
| Σ ε B · V, V T T T m T, t Ξ π Γ · G, ε Σ y Y y U, u Ξ μ Д δ D, d Φ ¢ Φ Φ F, f Ε ε Ye, ye; E, e* X x X x Kh, kh Ξ ε Ye, ye; E, e* Ye, ts Ξ ε Ye, ts Ye, ts Ξ ε Ye, ts Ye, ts Ξ ε Ye, ts Ye, ts | |
| T * G, ε y y y y U, u Δ Λ D, d Φ ¢ Φ φ F, f E ε Ye, ye; E, e* X x X x Kh, kh T + X x Zh, zh U U U TE, ts S S S Z, z Y + Y y Ch, ch | |
| Δ λ Φ ¢ Φ φ F, f E ε Ye, ye; E, e* X x X x Kh, kh F + X x Zi, zh U u u Ts, ts G a 3 ; Z, z U u U u Ts, ts Ch, ch | |
| E & Ye, ye; E, e* X x X x Kh, kh | |
| 7 + | |
| 3 9 9 1 2, 2 9 9 9 9 0h, eh | |
| | |
| rr H v I, i Lu W w Sh, sh | |
| A D Y, y L W W Snin, sheh | |
| тя <i>К к</i> К, к Бъ Б ъ п | |
| π | |
| м м м, п ьь Б . | |
| ъ- ни к, r. Ээ у Е, е | |
| 2 0 0 C, C E & 10 10 Yu, yu | |
| л п F, F F Я Я Ya, ya | |

*ye initially, after vowels, and after ъ, ъ; e elsewhere. When written as ë in Russian, transliterate as yë or ë.

RUSSIAN AND ENGLISH TRIGONOMETRIC FUNCTIONS

| Russian | English | Russian | English | Russian | English |
|---------|---------|---------|---------|----------|--------------------|
| sin | sin | sh | sinh | arc sh | sinh ⁻¹ |
| cos | cos | ch | cosh | arc ch | cosh ⁻¹ |
| tg | tan | th | tanh | arc th | tanh. 1 |
| ctg | coţ | cth | coth | arc cth | coth ⁻¹ |
| sec | sec | sch | sech | arc sch | sech ⁻¹ |
| cosec | CSC | csch | csch | arc csch | csch ⁻¹ |

| Russian | English |
|---------|-------------|
| rot 1g | curl log |

3/10

GRAPHICS DISCLAIMER

All figures, graphics, tables, equations, etc. merged into this translation were extracted from the best quality copy available.

| | Accesion For |
|---|--------------------|
| | NTIS CRA&I |
| 1 | DTIC TAB |
| ' | Justification [7] |
| | Бу |
| | Di tio tio / |
| | evaluability Codes |
| 1 | Grid Special |
| ١ | A-1 |
| l | <i>r</i> ·· |

DOC = 90095300

Page 1.

METHOD OF THE PREPARATION OF TECHNICAL FOAM.

Perm' plant of large-panel housebuilding.

B. S. Batalin, Yu. P. Ozhgibesov, A. L. Solovyev and D. P. Kiselev.

Are known the methods of the preparation of Keramzit-foam concrete (foam concrete) with the application of a glue-rosin frother on the basis of bright bait pine rosin, whose application makes it possible to obtain stable foam, via the frothing of the working composition of glue-rosin frother. The deficiency of bright pine gum rosin and the impossibility of applying other forms of technical rosin is a deficiency in the known methods, since the working composition of the frother, for example, glue-rosin on their basis gives unstable foam even with an increase to 1:5 (by the volume) ratio of the concentrate of frother in the water. This fact limits the propagation of effective keramzit-foam concrete and foam concretes in the building.

Target of invention - to raise stability of foam, to decrease time of its frothing, and to also raise heat engineering properties of articles. Is reached this by the fact that the frother - technical wood rosin of concentration 1:20-1:30 (by volume) before the frothing is treated in the magnetic field with intensity of 200-1000 G.

Ź

Essence of method consists of following.

Frother, for example, glue-rosin is prepared using known method, but dark extraction of technical rosin is used instead of bright bait pine rosin. Obtained thus frother of working composition of 1:20-1:30 with the passage on the delivery pipe before the batching into the centrifugal pump of the type 4NF is treated in the magnetic field with intensity 200-1000 G, which makes it possible to raise the stability of foam 1.8-2.0 times, to decrease the time of its frothing, to reduce the expenditure/consumption of frother per 1 m³ concrete 1.2 times, to decrease the consumption of cement per 5-10%, to reduce the weight of articles and to improve their heat engineering properties.

Processed thus frother is passed then through centrifugal pump of type 4NF and is used further on known technology.

Subject of invention.

Method of preparation of technical foam for manufacture of foam concrete articles via frothing of frother, which is characterized by fact that, for purpose of increase in stability of foam, decreases of time of its frothing, and also improvement in heat engineering properties of articles, frother - technical wood rosin of concentration 1:20-1:30 (by volume) before frothing treat in magnetic field with intensity of 200-1000 G.

DISTRIBUTION LIST

DISTRIBUTION DIRECT TO RECIPIENT

| ORGANIZATION | MICROFICHE |
|------------------------|------------|
| | |
| C509 BALLISTIC RES LAB | 1 |
| C510 R&T LABS/AVEADCOM | . 1 |
| C513 ARRADCOM | 1 |
| C535 AVRADCOM/TSARCOM | 1 |
| C539 TRASANA | 1 |
| Q591 FSIC | 4 |
| Q619 MSIC REDSTONE | 1 |
| Q008 NTIC | 1 |
| E053 HQ USAF/INET | 1 |
| E404 AEDC/DOF | 1 |
| E408 AFWL | 1 |
| E410 AD/IND | 1 |
| F429 SD/IND | 1 |
| POO5 DOE/ISA/DDI | 1 |
| PO50 CIA/OCR/ADD/SD | . 2 |
| AFIT/LDE | 1 |
| NOIC/OIC-9 | 1 |
| œv _ | 1 |
| MIA/PHS | 1 |
| IIYL/CODE L-309 | 1 |
| NASA/NST-44 | 1 |
| NSA/T513/TDL | 2 |
| ASD/FID/TITA | 1 |
| FSL | 1 |